



Nebraska Resources

Newsletter

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Agency Numbers to Remember

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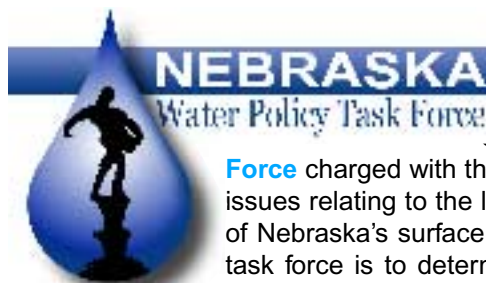
<http://www.dnr.state.ne.us>

Western Sarpy/Clear Creek Project Approved

By Tom Pesek

At its July 25, 2002, meeting in Grand Island, the Natural Resources Commission approved Nebraska Resources Development Fund assistance for the Western Sarpy/Clear Creek project along the Platte River near Ashland. The assistance was in the form of a grant for up to \$3,155,200.00, not to exceed 60% of the Papio-Missouri River NRD's eligible non-federal project

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The 2002 session of the Nebraska Legislature passed L.B. 1003, which among other actions created a **Water Policy Task Force** charged with the responsibility of addressing several key issues relating to the laws governing the management and use of Nebraska's surface water and ground water. Specifically the task force is to determine if any changes are needed to adequately address Nebraska's conjunctive use management issues.

The task force will also evaluate the utility of authorizing temporary water transfers and or additional types of permanent water transfers. A potential need for a water banking system that would facilitate the temporary or permanent transfer of water uses will also be evaluated. Finally, the task force is to determine if there are inequities between surface water users and ground water users and address if necessary, potential actions to address these inequities. If changes in laws are considered to be useful, the task force will develop draft legislation and procedures for authorizing and implementing the changes.

By law the **task force has 49 members**, appointed by the Governor. Members consist of five representatives from the NRDs, four from the power industry, five from municipalities, three from agricultural groups, two from recreation interests, three from environmental interests, twenty irrigators representing Nebraska's river basins, three members serving at large, a representative from the Dept. of Natural Resources and the Attorney General's Office and the Chair and Vice-Chair of the Natural Resources Committee of the Legislature.

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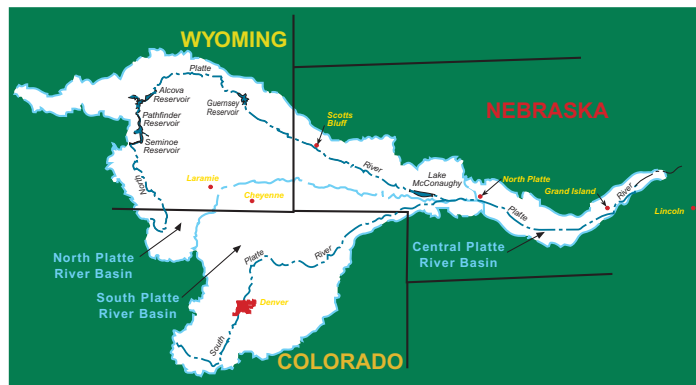
Nebraska Submits Draft Platte River New Depletion Plan

By Jim Cook

On July 1, 1997, Nebraska, Colorado, Wyoming and the U.S. Department of Interior signed what is called a Cooperative Agreement. That agreement created a partnership to develop a basin wide recovery implementation program for four species designated as threatened or endangered under the federal Endangered Species Act: the whooping crane, piping plover, least tern and pallid sturgeon. Previous articles in this newsletter have summarized the basic objectives of the proposed recovery implementation program. Development of that program continues with a tentative target date of late 2003 or 2004 for completing the formulation phase. Each of the states and the federal government will then have to decide if the program as proposed at that time is something it can support.

Among the elements of the proposed program are new depletion plans for each of the three states. Those plans are to address new depletions to the flows of the River in

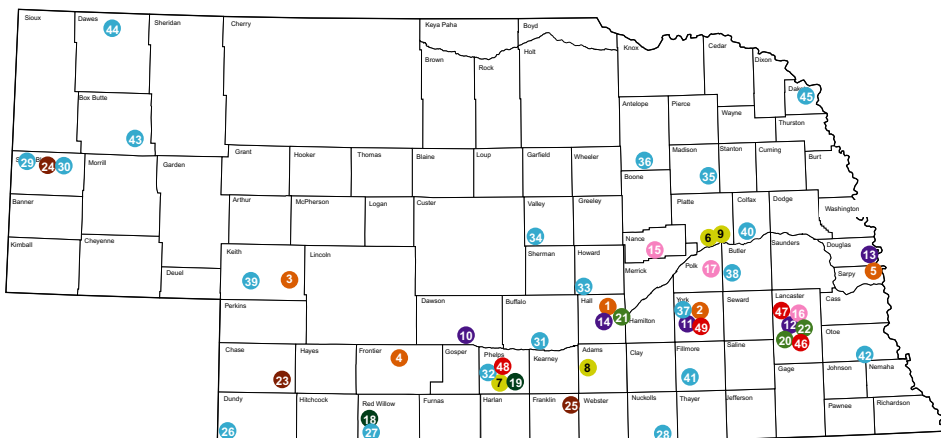
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Nebraska Water Quality Task Force Continued from page 1

The first meeting of the task force was held July 29th and 30th where an Executive Committee was selected (*noted with an * in the task force list below*). By law the Executive Committee consists of three irrigators and one representative each from agriculture, environmental, recreational, power, natural resources districts, and municipalities interests. Also on the Executive Committee will be one member from the state at large and the Director of the Department of Natural Resources, a representative from the Attorney General's Office and the Chair and Vice-Chair of the Legislature's Natural Resources Committee. The Executive Committee will develop the recommendations for consideration by the entire task force. The task force will meet a minimum of four times yearly and will provide its recommendations to the legislature and governor by December 2003.

A key charge of task force members will be keeping their constituent groups informed on the discussions of the task force and to bring input to the task force from the people they are representing.



Water Policy Task Force members were selected from across Nebraska to represent their interests.

Members of the Nebraska Water Policy Task

Natural Resources Districts

1. * Ron Bishop, CPNRD, Grand Island
2. John Turnbull, UBBNRD, York
3. James Meismer TPNRD, Paxton
4. Dan Smith, MRNRD, Curtis
5. Peter G. Rubin PMNRD, Bellevue

Power (Executive Committee member still to be selected)

6. Clint Johannes, Nebraska Electric G & T, Columbus
7. Don Kraus, CNPPID, Holdrege
8. Clayton Lukow, Southern Public Power District, Holstein
9. Brian Barels, NPPD, Columbus

Municipalities

10. Ted Cook, Lexington
11. Curtis Friesen, Henderson
12. Steve Huggenberger, Lincoln
13. Norm A. Jackman, Omaha
14. * Gary Mader, Grand Island

Agriculture

15. Galen Frenzen, Nebraska Cattlemen, Fullerton
16. * Jay Rempe, Nebraska Farm Bureau, Lincoln
17. Greg Whitmore, Nebraska Corn Growers, Shelby

Recreation

18. James B. Coady, McCook
19. * Gloria Erickson, Holdrege

Environmental

20. Lorrie Benson, Ground Water Foundation, Lincoln
21. * Paul Currier, Whooping Crane Trust, Doniphan
22. David Sands, Nebraska Audubon, Lincoln

At Large

23. Jack Maddux, Wauneta
24. Dennis Strauch, Mitchell
25. Nelson Trambley, Campbell

Irrigators

26. * Robert Ambrosek, Republican River Basin, Haigler
27. Claude Cappel, Republican River Basin, McCook
28. James L. Miller, Republican River Basin, Hardy
29. Harry H. Howell, North Platte River Basin, Morrill
30. LeRoy Pieper, North Platte River Basin, Mitchell
31. Dick Mercer, Middle Platte River Basin, Kearney
32. * Tom Schwarz, Middle Platte River Basin, Bertrand
33. James C. Nelson, Loup River Basin, Boelus
34. Allen J. Schmidt, Loup River Basin, Arcadia
35. Cecilia Grevson, Elkhorn River Basin, Madison
36. Richard Uhrenholdt, Elkhorn River Basin, Elgin
37. Nancy Eberle, Big Blue River Basin, Bradshaw
38. Eugene Glock, Big Blue River Basin, Rising City
39. Ken Schilz, South Platte River Basin, Ogallala
40. * Lumir A. Jedlicka, Lower Platte River Basin, Schuyler
41. Lyle D. Heinrichs, Little Blue River Basin, Shickley
42. Kathy Wittler, Nemaha River Basin, Talmage
43. John Burke, Niobrara River Basin, Alliance
44. Robert Hawthorne, White/Hat River Basin, Chadron
45. Bryce Andersen, Missouri Tribes River Basin, Dakota City

State Government

46. * Roger Patterson, Department of Natural Resources
47. * David Cookson, Atty Gen Off.
48. * Ed Schrock, Natural Resources Committee, Holdrege
49. * Elaine Stuhr, Natural Resources Committee, Bradshaw

Minutes, agendas and meeting schedules of the task force plus additional information will be posted on DNR's web site at www.dnr.state.ne.us.

Water

Administration

Spring/Summer

By Susan France

This year's drought has caused extensive water administration across the entire state. Additionally, many reservoirs have been drawn down to their minimum required levels. Applications for permits to conduct ground water in streams have increased in attempts to save fields.

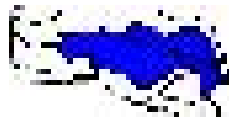
The following is a brief summary of administrative actions.



**North Platte,
South Platte and
Central Platte
River Basins**

In mid April, instream flow requirements in the Central Platte area were not met and so appropriations junior to 1993 were sent closing notices. This was the start of ongoing administration in this basin. Administration has continued in the Central Platte for instream flows throughout the summer. On June 24 and 26, junior appropriations on the North Platte and Platte Rivers above Gothenburg were closed for protection of water appropriations near North Platte and Gothenburg with priorities in the 1890s. On July 2, additional appropriations were closed for protection of an 1884 water right of the North Platte Canal. As of July 25, this administration was ongoing. In addition, administration is occurring on Buffalo Creek and Strever Creek for protection of appropriations with priorities in the 1920s.

The flows into Lake McConaughy from January through May were the lowest on record since Lake McConaughy was constructed. Irrigation districts in the Scottsbluff-Gering area were told early this year that it appeared that there would be an allocation of storage water from reservoirs in Wyoming. Several of these districts are borrowing storage water from another U.S. Bureau of Reclamation project and will have to pay the water back in the coming year or years.



**Lower Platte River,
Loup River,
Elkhorn River,
and Salt Creek**

On June 6, appropriators in these basins were regulated or closed for protection of the instream flow water rights (priority 1993) on the Lower Platte River. While such administration has occurred in two out of the last four years, it has occurred much later in the season. As of late July, the flows are still not sufficient to meet the instream flow requirements.



Republican River

The Bostwick Irrigation District requested protection of their natural flow rights this year. This has not occurred in the past. Therefore, the Department held meetings in the basin to inform natural flow users of possible administration of junior rights. On June 29, the Department closed 84 appropriations on the Republican River and its tributaries above Harlan County Reservoir for protection of Bostwick's (priority 1946), Frenchman Cambridge Irrigation District's (priority 1946), and Frenchman Valley Irrigation District's (priority 1890) appropriations. As of the date of this article, such administration is ongoing.



**Little Blue
River and Big
Blue River
Basins**

On July 18, the Department closed 279 appropriations in this basin and regulated 444 because required state line flows were not being met. The State entered into a compact with Kansas in 1971 that set requirements for state line flows during the summer months. In July the requirement is 75 cubic feet per second (cfs), and on July 17, the flows were measured at 62 cfs and were declining. There is a compact requirement on the Big Blue River and on July 18, the flows on the Big Blue went below the requirement. With the agreement of Kansas, and the generosity of the Lower Big Blue Natural Resources District (NRD), water in NRD reservoirs was released to meet the required flows. Even with the additional water, surface water rights still had to be administered August 5, to meet state line compact requirements.



**Niobrara River
Basin**

Water appropriations in the Upper Niobrara River Basin were closed on June 15 for an 1888 appropriation. Additional appropriations were closed on June 20, and on July 11 for this canal. Nineteen more were closed on June 27 for protection of Mirage Flats. In all 38 water appropriations were closed in this basin.



Draft Platte River New Depletion Plan Continued from page 1

the Lexington to Chapman reach if such depletions are caused by uses of surface water or ground water begun on or after July 1, 1997 or expansion of uses begun before that date. The plans do not have to prevent all new depletions to the river, just depletions to a portion of what the U.S. Fish and Wildlife Service calls "target flows." Those target flows already have been the subject of much debate and that debate will likely continue in the future. However, at least for now, a state new depletion program will not be acceptable as part of a basinwide program unless it provides for mitigation of any new depletions to the Service's "species flows" and "annual pulse flows." Higher "peak flows" (also included in the term "target flows") will not have to be protected by the new depletion plans. In most cases, however, the "species" and "annual pulse" flows are higher than the Nebraska instream flow appropriations that have been granted pre-

increase the shortages to the target flows and therefore also increase the need for collective efforts to reduce those shortages. Also, the nature of future depletions in each state will be different from those in the other two. Each state, therefore, is allowed to develop its own new depletion plan in a manner that best fits its needs and its political and institutional structure.

Before the Cooperative Agreement was signed in July of 1997, Colorado offered its new depletion plan for its portion of the South Platte River Basin. However, the depletion plan for Colorado's portion of the North Platte River basin and the plans for Wyoming and Nebraska had not been developed at that time. Each state was given until July 1, 2002, to complete and submit its proposed new depletion plan. Colorado's proposal for the North Platte River basin was completed and submitted in

users and environmental interests.

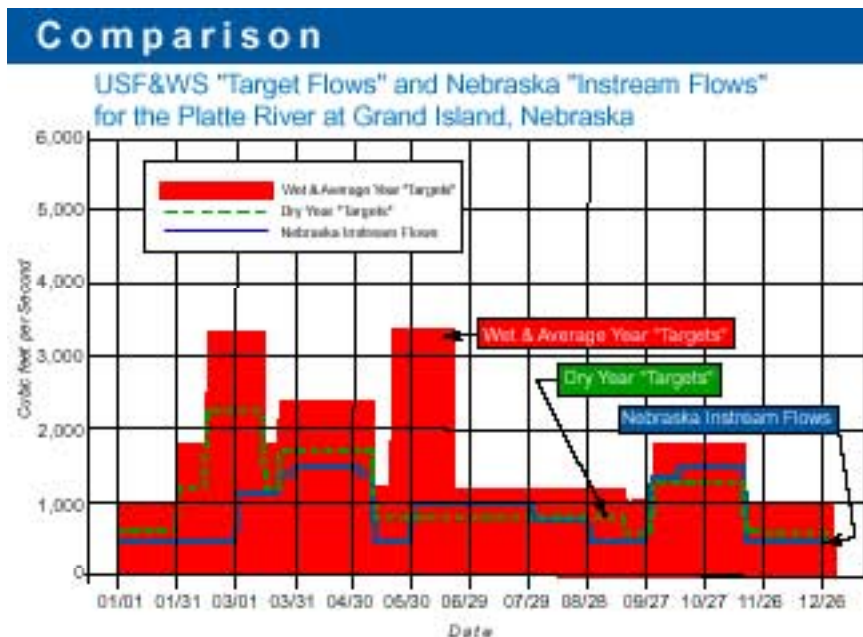
In the Nebraska plan, two separate time periods are addressed. The first is from July 1, 1997 until such time (currently proposed as January 1, 2004) when adequate models have been developed to allow evaluation of the impact of proposed new ground water depletions on the Platte and its tributaries. The draft new depletion plan proposes that the State of Nebraska, not the water users, be responsible for mitigation of depletions to the species and annual pulse flows, and also to Nebraska water rights, that occur as a result of new uses begun in that time period (July 1, 1997 to December 31, 2003).

Beginning in 2004, the obligation to mitigate for the adverse effects of new uses would change. For new uses beginning in that or a later year, the responsibility for offsetting depletions to the stream would be split between the person responsible for the new depletion and the State of Nebraska. The new user would not be responsible for the adverse effects of his or her new use on the Fish and Wildlife Services target flows, but would be responsible for any adverse effects on Nebraska water rights. That would include not only traditional water rights, some of which have priority dates as early as the late 1800's, but also the Nebraska instream flow appropriations as summarized in the earlier chart.

For a new use of ground water beginning after 2003, any adverse effects on Nebraska water rights would be determined through use of models now being developed by the Platte River Cooperative Hydrology Study (COHYST). That study has been ongoing since early 1998 and is sponsored by 11 state agencies and local subdivisions. It has been largely funded by grants from the Nebraska Environmental Trust. Initial results from the models are expected to be available in early 2003.

A new ground water user's responsibility for mitigating the adverse effects on Nebraska water rights would be implemented through the natural resources districts; those districts would condition permits for new wells and permits for expanded use of existing wells on the user providing mitigation water or paying a fee necessary to allow some other entity

Continued on page 5



viously to the Central Platte Natural Resources District and to the Nebraska Game and Parks Commission. The Nebraska instream flows can be compared with the applicable U.S. Fish and Wildlife Service target flows by reviewing the above graph.

Depletion plans are also deemed by the three states to be a necessary part of a comprehensive program. None of the states wants to bear the responsibility for another state's future depletions that

2001. Nebraska and Wyoming submitted their new depletions plans, both of which are in draft form, shortly after July 1 of this year.

Future articles in this newsletter will provide more information about the Colorado and Wyoming new depletion plans, but the remainder of this article is devoted to explaining how Nebraska's draft plan would work. That draft was developed by a committee of state and local agencies with input from water

Draft Platte River New Depletion Plan Continued from page 4

ity for imposing requirements on new surface water users would rest with the Nebraska Department of Natural Resources.

For at least some and perhaps the majority of the new post 2003 uses, there would be a depletion to the U.S. Fish and Wildlife Service species and annual pulse flows that would not be fully offset as a result of the water user's mitigation of adverse effects on Nebraska water rights. Under the draft Nebraska plan, the responsibility for that remaining mitigation would rest with the state of Nebraska, not with the new water user or with the natural resources districts. On a periodic basis, the collective effect of all new surface water and ground water depletions would be compared with the collective effect of all the mitigating measures used to offset the adverse effect on water rights. The state would implement such additional measures as are necessary to overcome the remaining depletion to the applicable target flows.

A number of issues remain to be resolved before final decisions can be made about the new depletion plan and Nebraska's participation in the future Platte River recovery implementation program. Among the questions that have not been resolved are the following:

- How closely must any well be connected to the Platte River or its tributary to be subject to mitigation requirements (the draft proposes that wells be included only if the depletion to the river or tributary in the first 40 years of pumping would equal 28% or more of the amount pumped during that time)?
- How much offset water would be needed to prevent depletions to surface water rights in wet years? Average years? Dry years?

- Should mitigation be required for depletions to surface water that do not adversely affect water rights but do affect recharge to aquifers?
- How much would it cost the State of Nebraska to do its share of the mitigation and how would that cost be funded?
- How much would it cost natural resources districts to administer the plan on a local basis and how would those costs be funded?
- How would offset water be provided and would new institutional mechanisms like water banking be necessary?

Many other decisions also would need to be made before the new depletion plan in its current or revised version could be implemented. The natural resources districts would need to create integrated management areas and to pass new rules and regulations for wells drilled after 2003. Before those actions could be taken, public hearings would be scheduled and conducted. Also, new legislation would be needed. Some bills could be introduced as early as the 2003 legislative session, but more activity is likely in the 2004 and perhaps even later legislative sessions.

For more information about Nebraska's draft new depletion plan contact Jim Cook, DNR Legal Counsel.

Water Rights Maps Being Converted to Digital

By Steve Gaul & Mike Thompson

The Department currently maintains records of over 8,200 surface water permits for irrigation and storage, most of which include a map depicting the location of use. Recent improvements in computer capability have provided a unique opportunity to place water rights maps and related information into a digital format. The digitizing involves converting paper maps into electronic files so that they can then be reproduced or layered with other data as needed.

Digital water rights maps could ultimately reduce the labor needed to add or modify a surface water permit while at the same time improving accuracy, accessibility to records and analysis capabilities. As a result, the Department has begun efforts to digitize water rights maps by November 2004 and to develop programming to assist in using the digital information.

Annually the Department receives requests for modification of about 100 to 150 existing surface water permits and requests for about 80 to 100 new permits, most of which involve maps. Permits can be issued for up to 35 different use categories and very often one parcel of land can have multiple types of water rights that overlap. Not only must the permitted areas be depicted correctly on maps, but the maps and permits are in turn used for actual administration of the water right based on use category, priority date and, in the case of irrigation; acres served.

Another goal is linking the spatial (map) data produced by the digitizing process with electronic data pertaining to individual water rights on the lands being depicted by the maps. However, both that and the mapping are long-term processes, and for the foreseeable future, paper water rights maps will remain the official maps for permits.



Rules and regulations will eventually need to be modified to allow digital signatures and certification to be attached to digital maps and documents filed with the Department. Currently, the Department requires documents filed to be physically signed by the applicant. Receipt of paper maps and other filings are recorded with the date and time, in the order they are received. Procedures that meet these and other statutory requirements will have to be developed for electronic and digital media filing.

The Department has maintained a visual record of irrigated land under various types of water rights for over 100 years. New technology provides a way to improve the accuracy and usability of that record.

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Roger K. Patterson, Director

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Western Sarpy/Clear Creek Continued from page 1



cost of \$5,258,667.00, including feasibility study costs of \$40,000.00. The total project cost is \$14,497,047.00 with the Corps of Engineers providing the majority of funding.

This flood control project, planned and designed by the Corps, involves the improvement of levees on both sides of the Platte River north of Highway 6 to contain flood flows up to 151,000 cubic feet-per-second, the 50-year frequency storm event. The project also includes the raising, relocation, or removal of several structures, primarily cabins and seasonal homes along the river. Floodplain zoning and management regulations will remain in effect and specific conservation measures will

be implemented to mitigate environmental impacts. A ring levee around the National Guard Camp Ashland will be constructed as a separate project.

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